

# C.SIGHT™ 2.0

Fast and accurate single-cell dispensing  
for cell line development



# Streamline your cell line development capabilities

The landscape of global research has shifted in the past two decades. With many major technological advancements made in that time, scientists have become better equipped to perform precise and complex analysis. In order to produce high yields of recombinant proteins for therapeutic applications, such as the production of monoclonal antibodies, stable producer cell lines need to be the previous generation of single-cell dispensers, the new C.SIGHT 2.0 carries a series of innovations that follow CYTENA's customer-oriented philosophy. By automating labor-intensive and time-consuming steps, the C.SIGHT 2.0 significantly streamlines cell line development (CLD) as well as cell and gene therapy. An innovative and ultrafast camera system, an intuitive software and full compatibility with automation

help define this new generation of CYTENA's single-cell dispensers. e developed. Here, cells are transfected with a gene of interest, isolated to derive monoclonal cell lines and, finally, screened for productivity, stability and quality. Building on the previous generation of single-cell dispensers, the new C.SIGHT 2.0 carries a series of innovations that follow CYTENA's customer-oriented philosophy. By automating labor-intensive and time-consuming steps, the C.SIGHT 2.0 significantly streamlines cell line development (CLD) as well as cell and gene therapy. An innovative and ultrafast camera system, an intuitive software and full compatibility with automation help define this new generation of CYTENA's single-cell dispensers.

## Why we stand out



Fast isolation - fill a 384-well plate in under 8 minutes



No risk of contamination



High single-cell isolation efficiency



Assurance of single-cell isolation via brightfield



Begin experiments in minutes thanks to our user-friendly software.



Compact size, compatible with biosafety cabinets

## Reducing the risk of cross-contamination

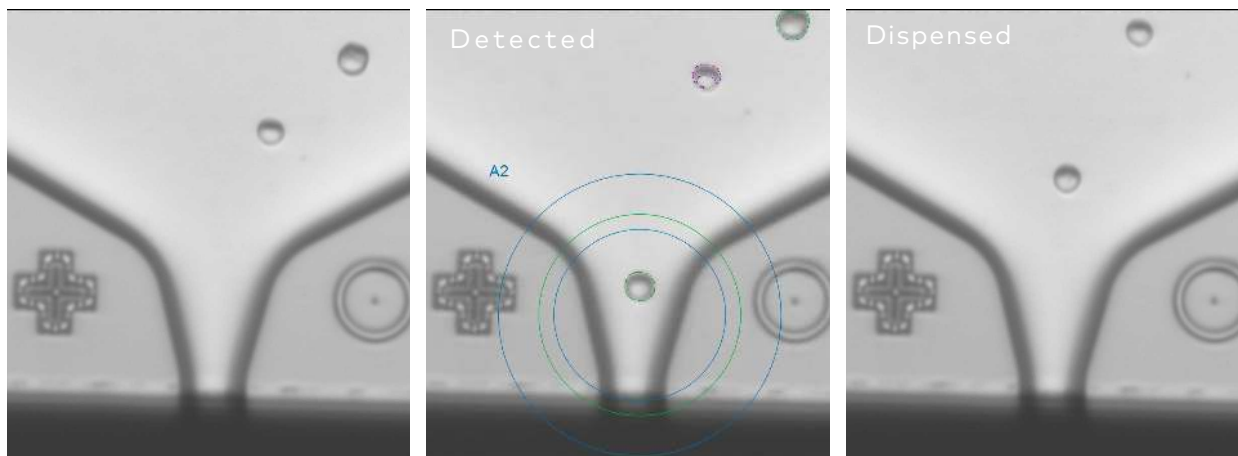
The C.SIGHT 2.0 uses our new EASY.ON cartridges, which were precisely engineered by microfluidic experts to ensure cell viability with the gentlest handling, even with the minimum 5  $\mu$ L volume. The ability to dispose of the cartridges eliminates the risk of cross contamination between samples. Plus, setting up your experiments has never been easier; EASY.ON cartridges are magnetically mounted for quick and easy loading.



## Assurance of cell clonality

The C.SIGHT 2.0 combines our patented single-cell dispensing technology with an intuitive and fast software. During an isolation run, each dispensing event is recorded in full-resolution brightfield and images for each event are collected. The instrument's operating software analyzes cell morphology to isolate single cells according to set parameters such as size, roundness.

This information is stored after every experiments and is readily accessible to generate comprehensive documentation supporting pharmaceutical safety approval by regulatory authorities.



# High resolution imaging

The C.SIGHT 2.0 has an innovative camera system that captures brightfield and images at full resolution. These images can be used to identify different cell types. All the images are saved for monoclonality assurance necessary during CLD.



C.SIGHT 2.0 carries a series of innovations that follows CYTEA's customer-oriented philosophy.

# Automation Compatible

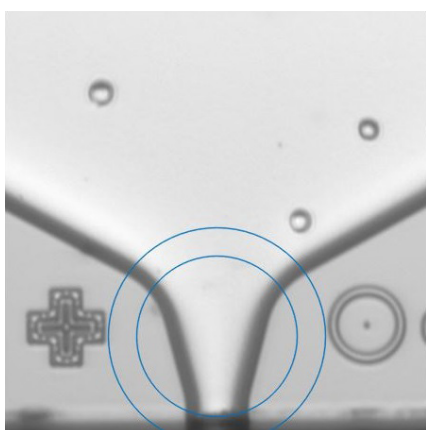
In order to best support high-throughput research, the C.SIGHT 2.0 is an automation friendly instrument. The lid from the C.SIGHT 2.0 can be programmed to open and close automatically for seamless cooperation with a robotic arm plate carrier. Additionally, previously established experiments can be saved as templates for easy setup of other following isolation runs. Finally, all the dispense runs are recorded and saved for future analysis and assurance of clonality.



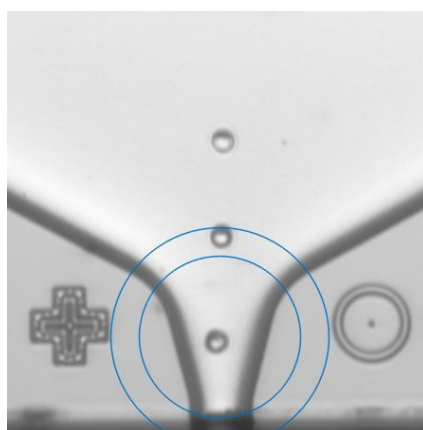
## Cell Focusing - Minimizing cell loss

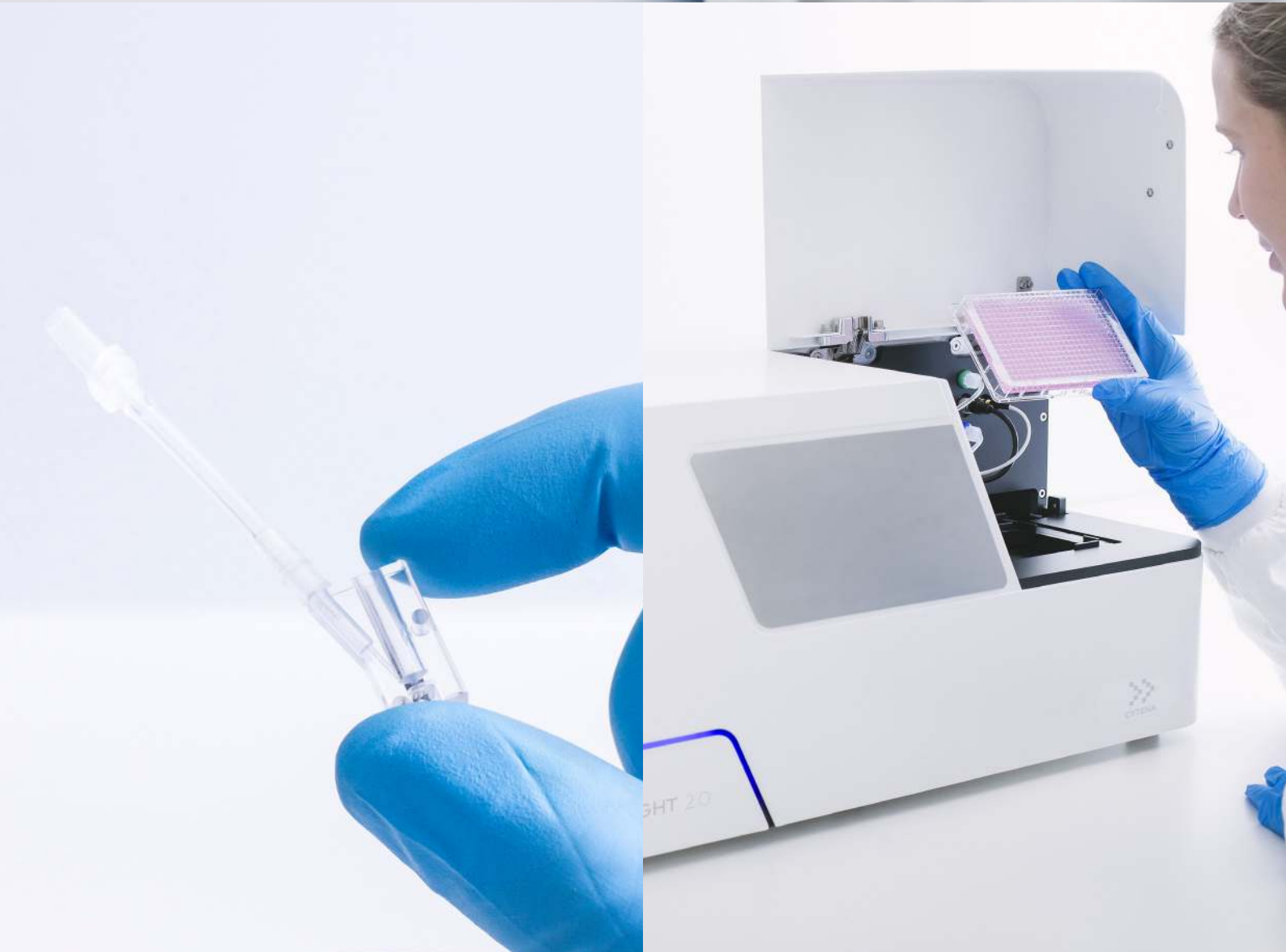
Add an additional layer of optimization with CYTENA's Cell Focusing technology, which gently aligns cells at the center of the dispensing cartridge for superior cell detection. It offers significant improvements when working with rare cell types as this alignment ensures that cells and their morphology are perfectly captured and measured, reducing cell loss and even increasing processing speeds. In combination with our proprietary EASY.ON cartridges, the C.SIGHT 2.0 can dispense an 384-well plate in under 8 minutes.

*Cell Focusing Off*



*Cell Focusing On*





# Technical Specifications

Samples	Eukaryotic cells
Cell size	Up to 40 µm
Multi-parameter sorting and isolation	Isolate cells based on size and shape
Droplet volume	~200 pL
Target plate or substrate	SBS format : 96-, and 384-well plates
Nozzle imaging	Objective 10x CMOS camera Optical resolution: 3µL
Processing times	Single-cell dispensing 96-well plate: ~ 2 min Single-cell dispensing 384-well plate: ~ 8 min
Embedded computer	Win10 (x64) Professional
Compatibility and automation	Automation-ready incl. API and DLLs Compatible with standard biosafety cabinets class 2
Certification	Certified CE, CB, UL (TÜV), RoHS
Power consumption	156 W
Net voltage	100 - 240 V
Footprint	635 x 400 x 282 mm (W x D x H)
Weight	40 kg



# We create the future of health.



## CYTENA, A BICO COMPANY

CYTENA is a leading provider of high-precision instruments for isolating, dispensing, imaging, analyzing and handling biological cells. The company continues to build on the success of the single-cell dispensing technology it patented as a spin-off from the University of Freiburg, Germany, in 2014. Today, as part of BICO, the world's leading bio convergence company, CYTENA's award-winning devices are still manufactured in Germany and used at prestigious academic and pharmaceutical labs around the world to automate workflows in numerous application areas, including stable cell line development, single-cell omics, high-throughput screening and drug discovery. CYTENA's breakthrough innovations for the lab combine advanced automation, state-of-the-art software engineering and the latest insights in cell biology to maximize efficiencies in the life sciences and create the future of health. Learn more at [www.cytena.com](http://www.cytena.com)